

ENGINEERING STATEMENT

In Support of a

COUNTERPROPOSAL

Channel 267, Wellington, TX

MM DOCKET 97-104, RM-9048

HUNT BROADCASTING, INC.

This engineering statement is offered in support of a counterproposal in MM Docket 97-104. The instant counterproposal is submitted by Hunt Broadcasting Company, Inc., licensee of KDVE(FM) ("KDVE") Denison-Sherman, Texas. KDVE proposes to change its licensed facilities by seeking a change in its community of license (Denison-Sherman to Azle, Texas) and a co-channel upgrade to a full class C. In order to facilitate this scenario, channel 268C1 must be deleted at Lawton, OK (KLAW). KDVE proposes to delete channel 268C1 and substitute channel 267C1. Presently that channel is being proposed at Wellington, Texas. Therefore, this counterproposal is mutually exclusive with the NPRM (DA 97-586).

The channel study for 269C at Azle also indicates a short space to KJKB on 269A at Jacksboro, Texas. However that channel has previously been deleted in another docket which is not yet final. This matter will be discussed further Jacksboro section of the instant statement.

In addition, in MM Docket 95-126, 282C2 was substituted for channel 270C2 at Paris, Texas, and channel 273A was substituted for channel 272A at Madill, Oklahoma. On reconsideration Hunt indicated that it had filed an application for KDVE which eliminated the need for Paris to

change channels. The reconsideration in that proceeding is still pending. The instant proposal will eliminate the need for both Paris and Madill to relocate to other channels. Since the channel changes in MM Docket 95-126 are not yet final, this proposal will provide the additional benefits of eliminating these two channel moves. Nevertheless, the instant counterproposal is consistent with either channel at Paris and Madill. See Exhibit E, Figure 1.

A previous working agreement between Hunt and the license of KLAU(FM) provides for an orderly channel substitution at Lawton and the Jacksboro facility (KJKB) is commonly owned with KDVE, therefore there are no forced channel changes or show cause orders required.

Each FM facility change proposed in the KDVE Counterproposal is discussed separately. The nature of each station's change is shown by an allocations study at the proposed allocation site. In addition, a US Census Bureau Tiger map depicting the proposed allocation site and the respective class 70 dBu contour is included in the community of license and channel change proposal as are maps depicting gain (loss) areas in population and land area.

DELETING KDVE CH 269C1 @ DENISON-SHERMAN, TEXAS
& SUBSTITUTING CH 269C @ AZLE, TEXAS.

KDVE presently operates on channel 269C3 licensed to Denison-Sherman, Texas. In MM Docket 95-126, channel 269C3 was deleted and channel 269C1 substituted for use by KDVE.

Presently Hunt has an application pending for the C1 facility granted in the above captioned Docket.

The instant counterproposal proposes to delete channel 269C1 at Denison-Sherman, Texas, relocate the antenna reference coordinates 111.19 kilometers southwest (252.3'), upgrade to A class C and substitute channel 269C to Azle, Texas, for use by KDVE. Azle is 57.44 kilometers (@ 162.4') from the proposed channel 269C reference coordinates. KDVE will provide more than adequate 70 dBu service to all of Azle since the maximum class C 70 dBu service for a class C is 67.7 Kilometers.

Exhibit E, Figure 1 is an allocations study of channel 269C at the KDVE reference coordinates. This study depicts all of the necessary changes for the proposed allocation. KLAU(FM) Lawton, Oklahoma, presently operates on channel 268C1. The instant counterproposal proposes to delete this channel at Lawton and substitute channel 267C1 (the KLAU first adjacent).

KJKB(FM) Jacksboro, Texas, presently operates on channel 269A. However, this channel was deleted in MM Docket 95-126 and channel 252A substituted. In MM Docket 96-10 channel 252A was deleted and channel 299A substituted. Presently a petition is before the Commission (MM Docket 97-91) to delete channel 299A at Jacksboro and substitute channel 237A. The instant engineering statement assumes either channel as a substitute. Neither channel 299A or channel 237A conflict with the proposals in the instant

counterproposal. KJKB presents no inherent problems since it and KDVE are co-owned. The spacings for channel 299A and/or 237A are discussed in detail in the KJKB section of the statement.

KLAW(FM) Lawton, Oklahoma, presently operates on channel 268C1. The instant counterproposal proposes deleting channel 268C1 at Lawton with the substitution of channel 267C1 (KLAW's first adjacent). This will require a slight antenna reference change (site restriction) on the part of KLAU. Hunt has entered into an agreement with the licensee of KLAU which provides for this restriction.

The substitution of channel 267C1 for channel 268C1 at Lawton conflicts (short spaces) the allocation of channel 267C3 at Wellington, Texas. Therefore, the Hunt Counterproposal is mutually exclusive with the NPRM. However, an alternate channel is offered for allocation at Wellington. This is discussed in detail in the KLAU and Wellington sections of the instant statement.

Exhibit E, figure 2 is a computer generated map using a V-Soft "Interdlg" program. The 60 dBu of the licensed KDVE (class C3) and the proposed class C is depicted. This study establishes the gain and loss areas. Exhibit E, figure 3 is the same type study depicting the gain/loss area of channel 269C1 at its allocation coordinates as compared to the instant class C proposal. Exhibit E, figure 4 is a gain/loss map depicting the KDVE pending Form 301 and the instant counterproposal class C.

All of these studies depict some loss area all of which have in excess of a minimum of five remain services. Exhibit E, figure 5 is a INTERDLG generated map depicting the remaining services in the loss area between the instant class C and the KDVE licensed class C3. Exhibit E, figure 6 is a similar study depicting remaining services in the class C1 allocation site to the instant counterproposal class C loss area. Exhibit E, figure 7 is a similar study demonstrating the remaining services in the loss area between KDVE's class C1 application site and the proposed class C. All studies depict in excess of five remaining services.

A complete list of all stations used in the remaining services study are shown in Exhibit E, figure 8. Listed are the technical parameters, site coordinates and the number of the station's corresponding contour in Exhibit E, figures 5, 6 & 7.

Denison-Sherman will continue to be served by three local AM stations after channel 269C1 is deleted. These stations are listed in Exhibit E, figure 9. It should be noted that KDSX was allocated a channel in the AM expanded band. Exhibit E, figure 10 is a US Census Bureau Tiger map depicting the exact community boundaries of Denison-Sherman with the 5 mV/m contours shown for each station. The "dotted" line is the 5 mV/m contour of KDSX using a transmitter site and technical parameters authorized for the expanded band.

Exhibit E, figure 11 is a population study depicting the number of persons which will be in the Azle 269C 60 dBu contour. Exhibit E, figure 12 is a similar population study for the pending KDVE Form 301 site (AP 269C1) and Exhibit E, figure 13 is for the 269C1 allocation site. Exhibit E, figure 14 is a population study for the 60 dBu of the licensed KDVE (class C3) facility. The population and area gain/loss are computed as follows;

<u>FACILITY</u>	<u>POPULATION</u>	<u>AREA</u>
AD269C	1,641,373	26,485.4 Sq Km
KDVE (AP 269C1)	1,061,263	16,179.2 Sq Km
AL 269C1 (Aloc Site)	560,796	16,424.5 Sq Km
KDVE.L (C3 Site)	167,411	4,695.1 Sq Km

Exhibit E, figure 15 is a Delorme "Streets" map with an exact scale V-Soft "Interdlg" overlap depicting the allocation site of channel 269C, the area community boundaries of Azle, Texas, and a maximum class C 70 dBu contour (67.7 kilometers). The instant counterproposal antenna location area will provide for a 100 KW ERP and 600 meter antenna height above average terrain. In addition, FAA has approved and a 2,000 feet structure has been completed in the immediate area.

The reference coordinates and 70 dBu contour were plotted and drawn by a computer using a "V-Soft" INTERDLG computer program. Exhibit E, figure 16 is a copy of a US Census Bureau "Tiger" map at a scale which emphasizes the 70 dBu to Azle community boundaries clearance. This map was used to determine the exact penetration amount of the 70 dBu into the Fort Worth urbanized area. Using the appropriate

instruments, it was determined that the AD 269C at Azle would produce a 70 dBu penetration of 3.87%.

DELETING CH 268C1 @ LAWTON
& SUBSTITUTING CH 267C1

If channel 269C is allocated to Azle, there would be a short space of 70.55 kilometers to KLAU(FM) Lawton. However, after KLAU is reassigned to first adjacent channel 267C1 all short spacing between the two stations is eliminated. Exhibit E, figure 17 is an allocations study for channel 267C1 at Lawton. Presently it requires a site restriction of 1.36 kilometers (@ 131.2°) from its present site due to protecting the class C facility of KWOX(FM) Woodward, Oklahoma. The licensee of KLAU has agreed to this site restriction.

The KLAU gain/loss area map and population count is included and uses the current licensed 60 dBu contour (channel 268C1, 100 KW ERP @ 180 meter antenna HAAT) as compared to a hypothetical full facility class C1 (channel 267C1, 100 KW ERP @ 299 meters antenna HAAT) at the channel 267C1 allocation coordinates. No loss area appears since the licensed 60 dBu is entirely inside the allocation 60 dBu. This is due to the channel 267C1 site restriction being only 1.36 kilometers @ 131.2° from the KLAU licensed site. See Exhibit E, Figure 18.

A population study was conducted to determine the AD 267C1 area and population gain. The results of that study are shown in Exhibit E, figure 19.

SUBSTITUTING CH 278C3 @ WELLINGTON, TEXAS

The substitution of channel 267C1 at Lawton conflicts with the proposed allocation of channel 267C3 at Wellington, Texas. Hunt in the instant counterproposal, offers a plethora of alternate channels at the site proposed by Stacey Allen Austin's NPRM; 271C3, 274C3, 276C3, 278C3, 297C3 or 298C3. See Exhibit E, figures 20, 21 & 22. Hunt suggest the substitution of channel 278 in lieu of channel 267 since the allocation could operate as a class C2.

No gain/loss area map and population count is included for the channel substitution at Wellington since the site reference coordinates remain the same for all of the Hunt substitute channels.

SUMMARY

Technically the KDVE Counterproposal can be summarized as follows;

<u>Call Sign</u>	<u>First Local Service</u> ^{\2}	<u>Land Area</u> ^{\1} <u>Gain (loss)</u>	<u>Persons Served</u> ^{\1} <u>Gain (Loss)</u>
KDVE C3 to C	yes	21,790.3 (G)	1,473,962 (G)
KDVE C1 ^{\3} to C	yes	10,060.9 (G)	1,080,577 (G)
KDVE C1 ^{\4} to C	yes	10,306.2 (G)	580,110 (G)
KLAW	no	3,634.2 (G)	96,955 (G)
KJKB	no	No Change	
AD 278	yes	No Change	

(G) Gains in land area & population

NET GAINS OF COUNTERPROPOSAL

1 New local Service

Land Area Net Gain 10,060.9 Sq Km

Persons Served Net Gain 1,473,962 (KDVE C3)

Persons Served Net Gain 1,080,577 (KDVE C1 - Allocation Site)

Persons Served Net Gain 580,110 (KDVE C1 - Pending Application Site)

Persons Served Net Gain

AD267C1 (KLAW) 96,955

^{\1} Inside the 60 dBu contour

^{\2} New community of license

^{\3} Ch 269C1 @ Denison-Sherman - Allocation Site

^{\4} Ch 269C1 @ Denison-Sherman - Application Site

CONCLUSION

Exhibit E, Figure 23 is an allocations study using the instant counterproposal allocation coordinates for KDVE as a class C at Azle, Texas. This exhibit differs from Exhibit E, figure 1 in depicting the elimination of short spacing for the allocation of channel 269C at Azle. In this exhibit, all pertinent facilities are depicted at their proposed class, channel and reference coordinates. If the instant counterproposal is allocated as it is submitted, technically it will contribute to the maximum utilization of the spectrum.

Continued from previous page

33 23 20 N.
97 43 03 W.

Class C
Current rules spacings
Channel 269C -101.7 MHz

Search Date
05-18-97

Call	Ch#	City	State	Bear'	Dist'	R'grd	Margin
KLTD	269C3	Temple	TX	172.6	236.59	237.0	-0.41 *
WRR	266C	Dallas	TX	141.7	112.91	105.0	7.91 *
KTXQ	271C	Fort Worth-Dallas	TX	142.2	113.24	105.0	8.24 *
KOXB	268C1	Brownwood	TX	213.6	221.00	209.0	12.00
KMADFM	272A	Madill	OK	47.6	118.17	95.0	23.17
DE272	272A	Madill	OK	47.6	118.17	95.0	23.17
Of Note: Channel Change Required in MM Docket 95-126 no longer necessary							
KBUS	270C2	Paris	TX	79.4	217.60	188.0	29.60
DE270	270C2	Paris	TX	79.4	217.60	188.0	29.60
Of Note: Channel Change Required in MM Docket 95-126 no longer necessary							
KRHDFM	272A	Duncan	OK	349.5	126.70	95.0	31.70
KNUE	268C	Tyler	TX	115.8	287.77	241.0	46.77

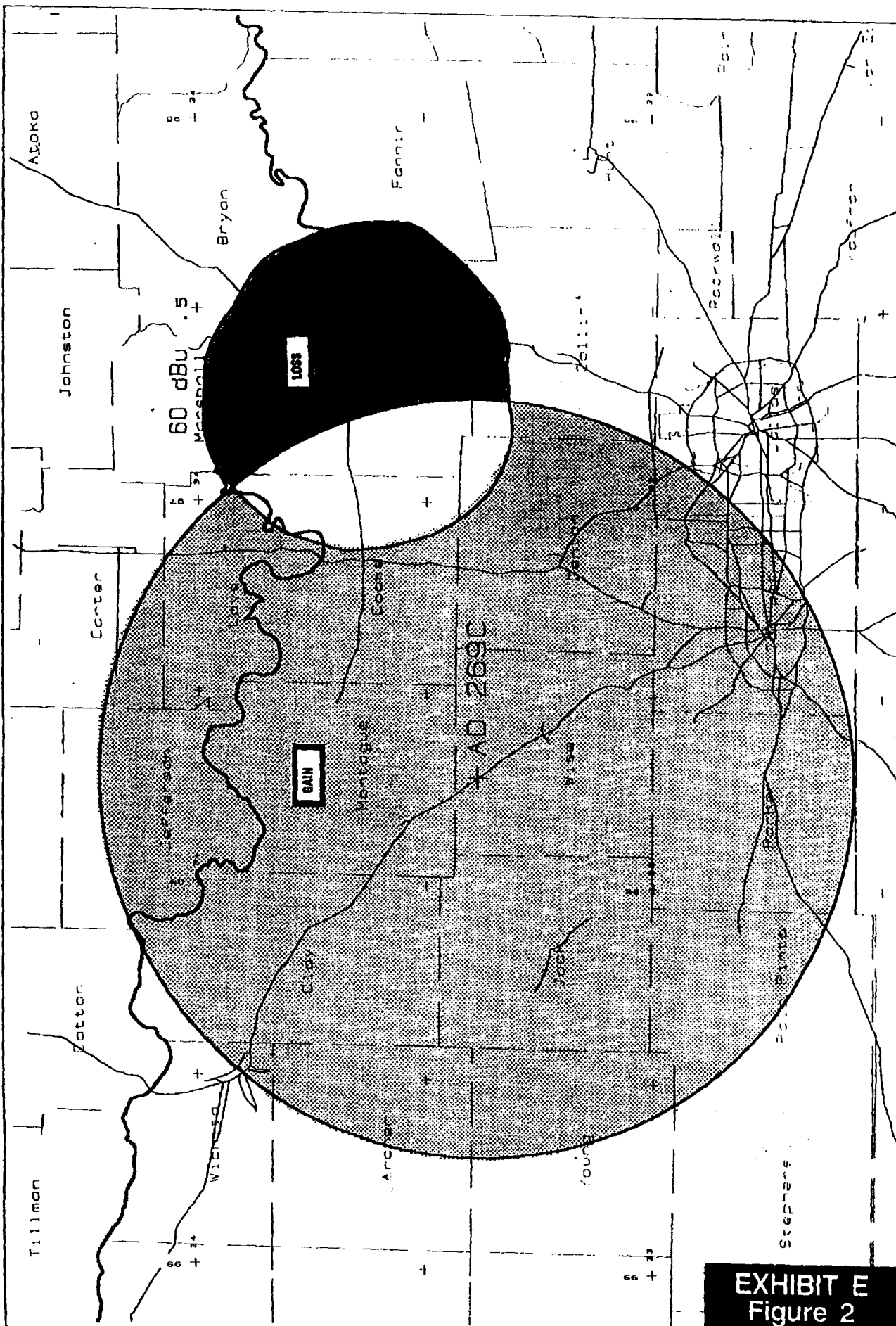


EXHIBIT E
Figure 2

Scale in km 0 10 20 30 40 50 60 70	KLAW BLH801010AC 268C1 100kW	AD 269C/ KDVE.L G/L AREA
	N. Lat. 33 26 54 W. Lng. 97 28 02	REYNOLDS TECHNICAL - 05/97

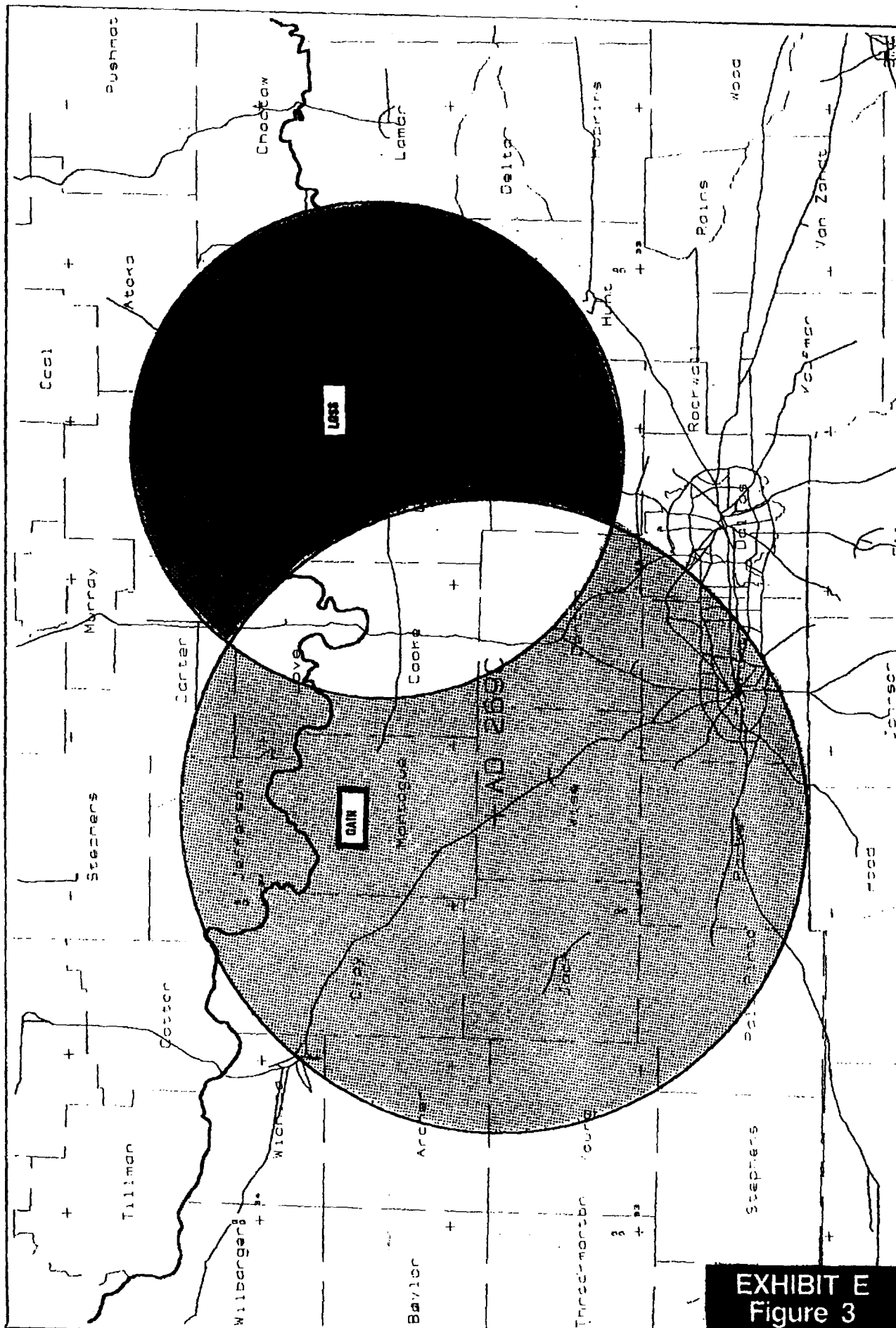


EXHIBIT E
Figure 3

Scale in km 0 10 20 30 40 50 60 70 80 90	KLAW BLH801010AC 268C1 100kW	AD 269C/AL 269C1 G/LAREA
	N. Lat. 33 29 58 W. Lng. 97 18 16	REYNOLDS TECHNICAL - 05/97

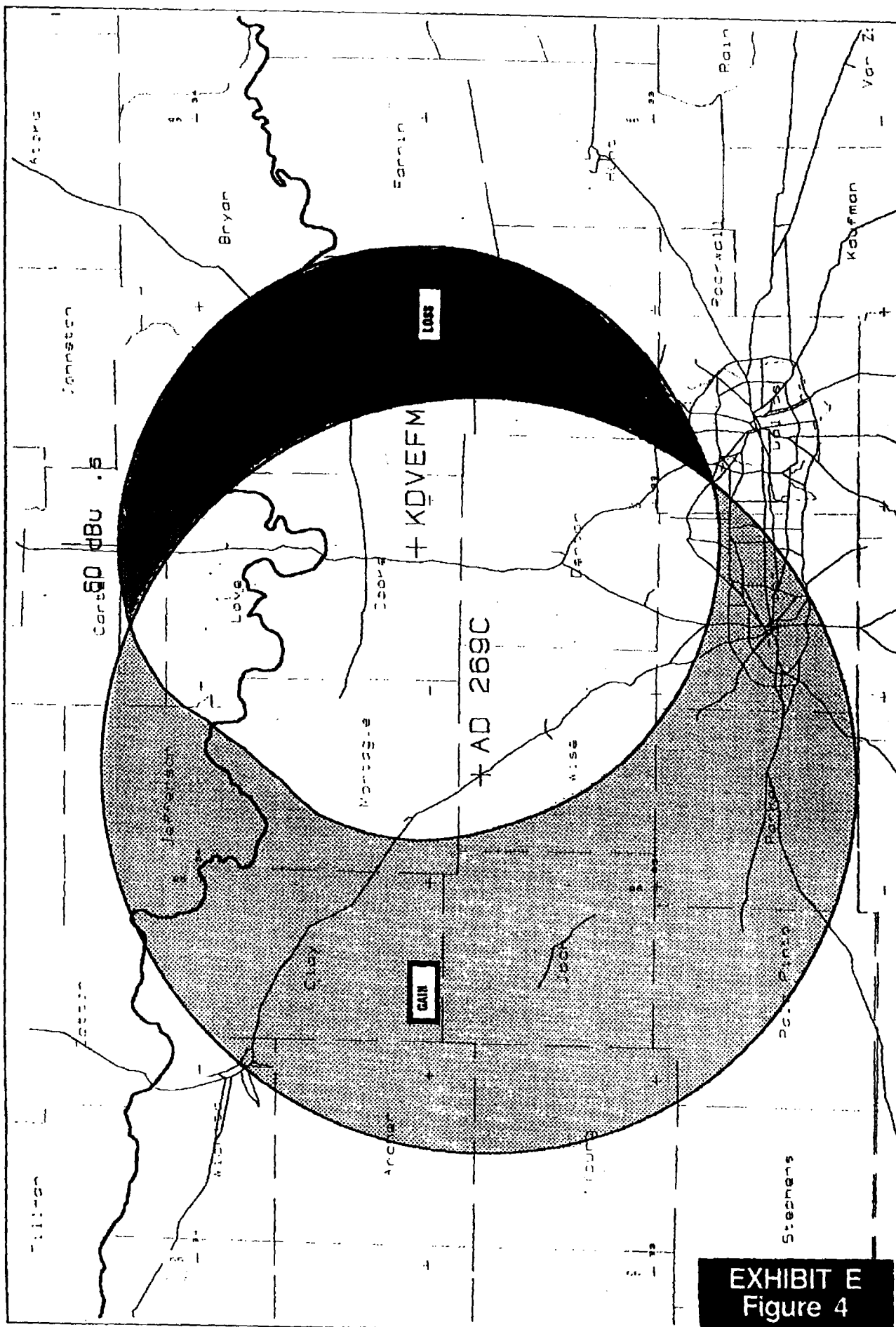
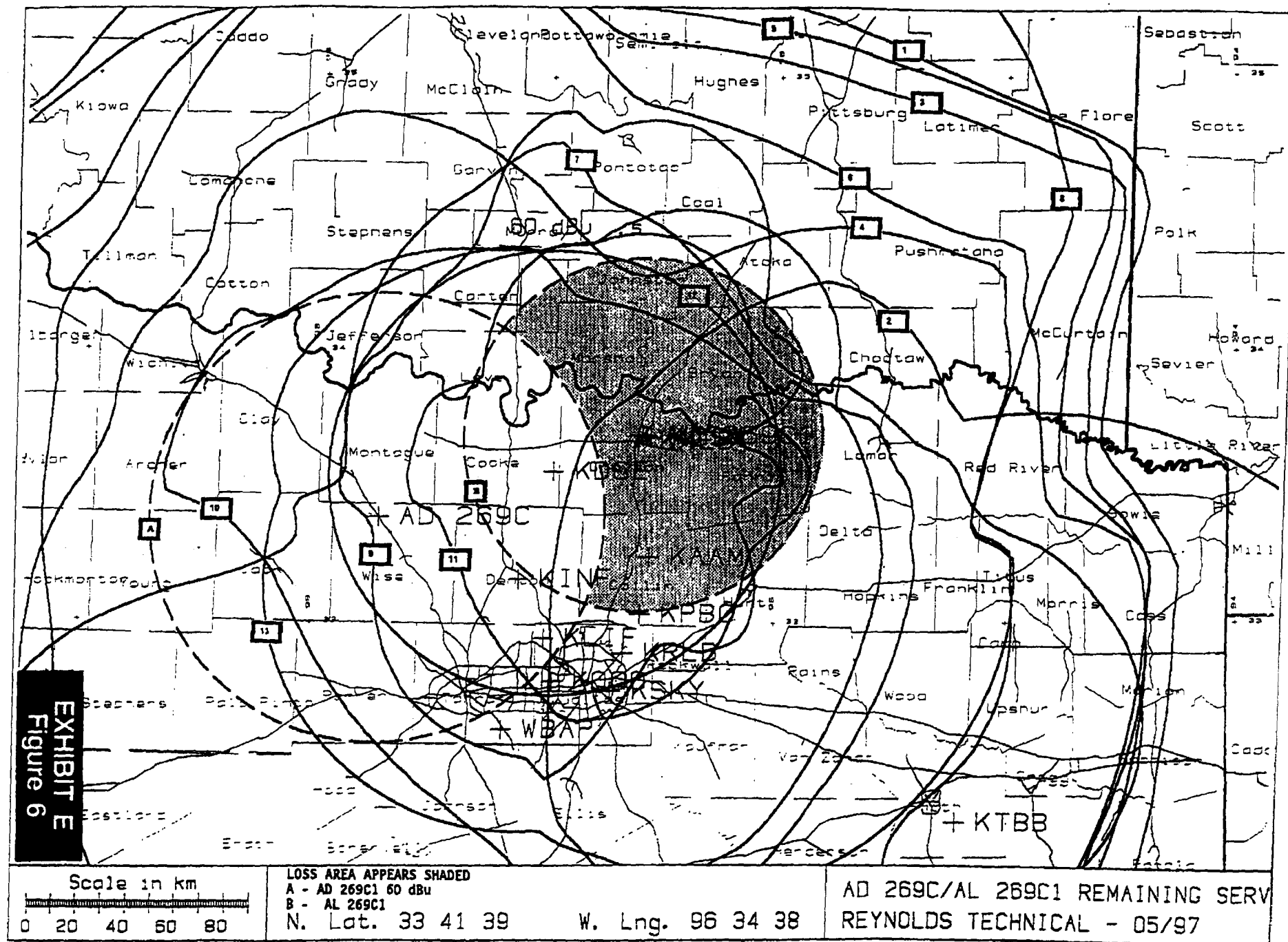


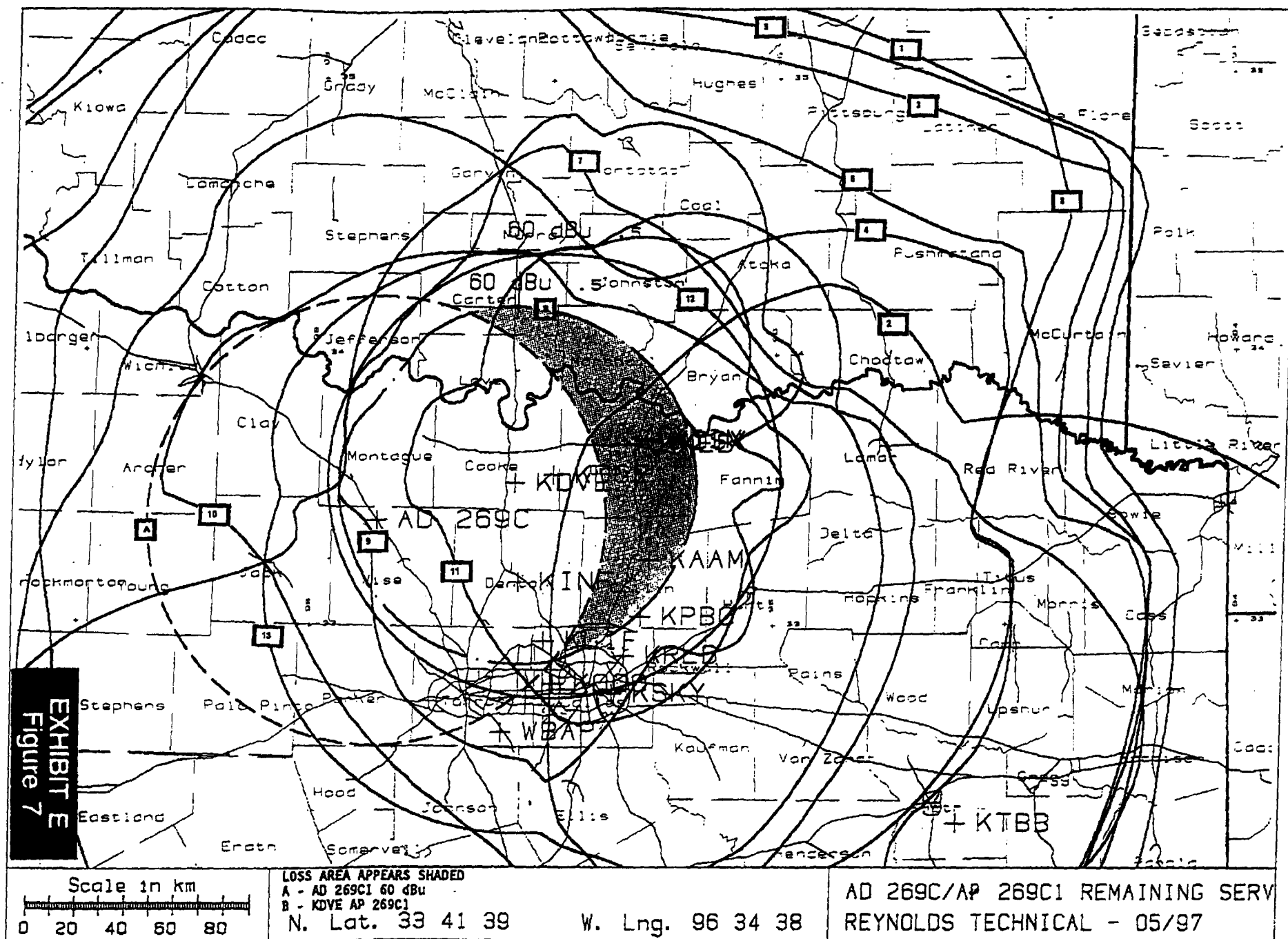
EXHIBIT E
Figure 4

Scale in km
0 10 20 30 40 50 60 70

KLAW BLH801010AC 268C1 100kW
N. Lat. 33 26 54 W. Lng. 97 28 02

AD 269C/AP 269C1 G/L AREA
REYNOLDS TECHNICAL - 05/97





**ENGINEERING STATEMENT
IN SUPPORT OF A**

COUNTERPROPOSAL

Channel 267C3, Wellington, Texas
MM Docket 97-104, RM-9048
HUNT BROADCASTING, INC.

**KDVE.L (Class C3), KDVE.A (Class C1) & AL 269C1
REMAINING SERVICES STUDY**

<u>CALL SIGN</u>	<u>CITY OF LICENSE</u>	<u>ERP</u>	<u>ANTENNA (meters/RMS)</u>	<u>SITE COORDINATES</u>	<u>CONTOUR NO.</u>
WBAP	FT. Worth	50	2810.82	32-36-38 97-10-00	1
KTBB	Tyler	5	674.73	32-16-18 95-12-23	2
KRLD	Dallas	50	2788.05	32-53-25 96-38-44	3
KPBC	Garland	10	1021.20	33-01-58 96-34-31	4
KSKY	Balch Sp	10	930.97	32-45-02 96-41-41	5
KLIF	Dallas	5	732.25	32-56-40 96-59-25	6
KOOO	Dallas	50	2236.99	32-47-10 96-57-00	7
KAAM	Plano	5	666.37	33-14-34 96-32-29	8
KDSX	Denison- Sherman	.5	204.39	33-41-08 96-32-28	9
KXEB	Sherman	1	289.68	33-40-25 96-35-40	10
KJIM	Sherman	1	292.9	33-41-30 96-33-29	11
KDGE	Gainesville	100	578.0	33-33-36 96-57-35	12
KINF	Denton	5	798.88	33-09-45 97-06-18	13

**EXHIBIT E
Figure 8**

**ENGINEERING STATEMENT
IN SUPPORT OF A**

COUNTERPROPOSAL

Channel 267C3, Wellington, Texas
MM Docket 97-104, RM-9048
HUNT BROADCASTING, INC.

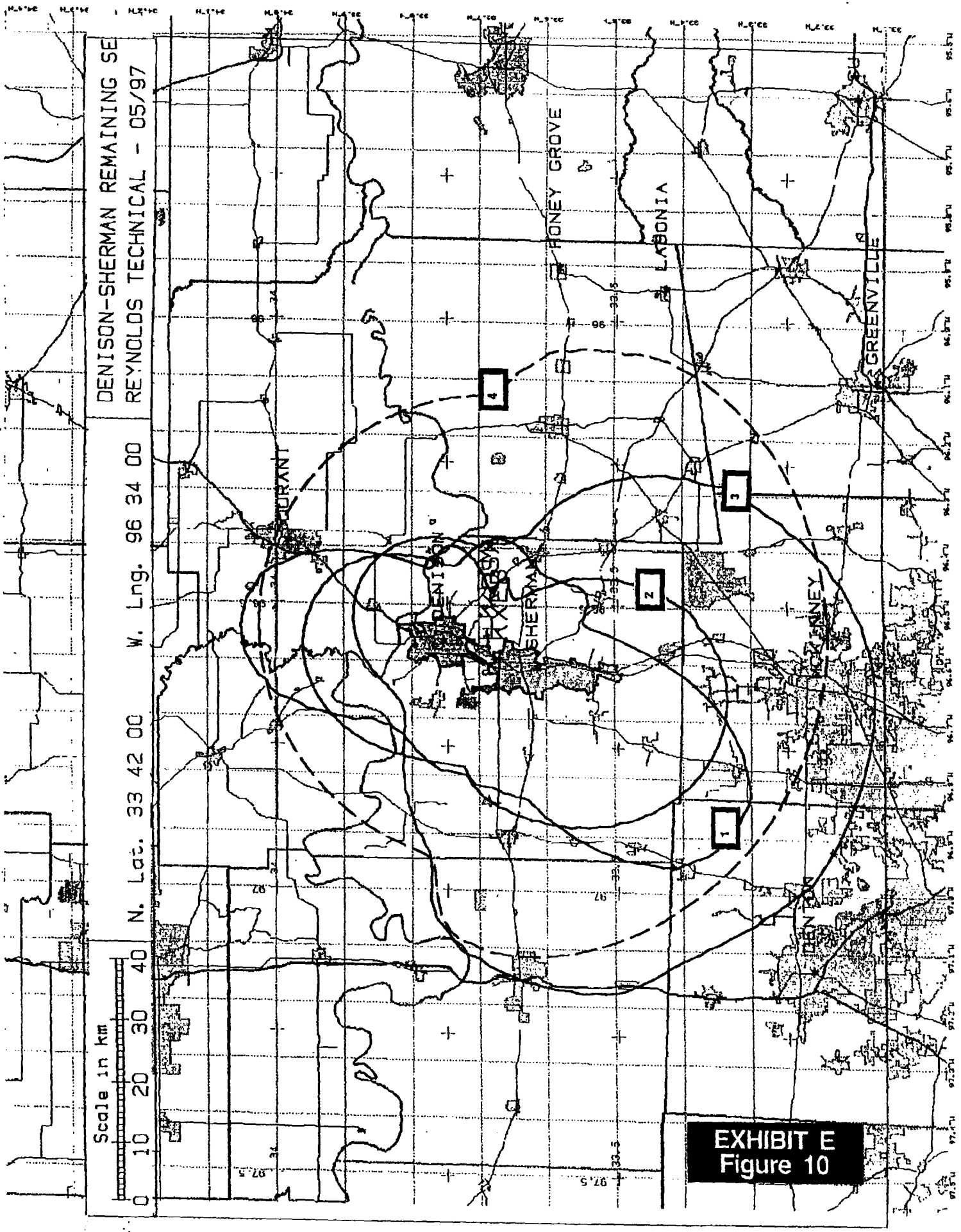
DENISON-SHERMAN SERVICES REMAINING

[SERVICES LICENSED TO DENISON AND/OR SHERMAN AFTER KDVE ASSIGNED TO AZLE,
TEXAS]

<u>CALL SIGN</u>	<u>COMMUNITY OF LICENSE</u>	<u>POWER</u>	<u>COORDINATES</u>	<u>EFFICIENCY</u>	<u>CONTOUR NUMBER</u>
KDSX	Denison-Sherman	.5 KW	33-41-08 96-32-28	204.39	1
KXEB	Sherman	1 KW	33-40-25 96-35-40	289.68	2
KJIM	Sherman	1 KW	33-41-30 96-33-29	292.90	3
KDSX ¹	Denison-Sherman	10 KW	33-41-08 96-32-28	980.31	4

¹ Received allocation in the new AM Expanded Band

**EXHIBIT E
Figure 9**



DENISON-SHERMAN REMAINING SE
REYNOLDS TECHNICAL - 05/97

N. Lat. 33 42 00 W. Long. 96 34 00

Scale in km
0 10 20 30 40

EXHIBIT E
Figure 10

**ENGINEERING STATEMENT
IN SUPPORT OF A**

COUNTERPROPOSAL

Channel 267C3, Wellington, Texas
MM Docket 97-104, RM-9048
HUNT BROADCASTING, INC.

POPULATION & AREA STUDY - CH 269C @ AZEL, TEXAS

[DEPICTING PERSONS AND LAND AREA SERVED WITH MAXIMUM CLASS C]
(USING INSTANT COUNTERPROPOSAL REFERENCE COORDINATES)

AD 269 POP COUNTS KDVE (FM)					# 1	5/18/97
ST	County	Co. Pop.	percent	Pop.	Total	
596	TX Dallas	1852810	10	185281		
582	TX Collin	264038	12	31684		
782	TX Wichita	122378	12	14685		
630	TX Grayson	95021	22	20905		
544	TX Archer	7973	41	3269		
790	TX Young	18128	41	7432		
721	TX Palo Pinto	25055	44	11024		
759	TX Tarrant	1170103	79	924381		
578	TX Clay	10024	88	8821		
723	TX Parker	84785	92	59602		
588	TX Cooke	30777	99	30469		
601	TX Denton	273525	100	273525		
658	TX Jack	6981	100	6981		
708	TX Montague	17274	100	17274		
787	TX Wise	34879	100	34879		
TX TOTALS =					1,630,012	
802	OK Carter	42919	1	429		
828	OK Jefferson	7010	71	4977		
836	OK Love	8167	73	5955		
OK TOTALS =					11,361	
TOTAL POPULATION =					1,641,373	

Land area inside 60 dBu contour (91.8 KM) - 26,485.4 Sq Km

**EXHIBIT E
Figure 11**

**ENGINEERING STATEMENT
IN SUPPORT OF A**

COUNTERPROPOSAL

Channel 267C3, Wellington, Texas
MM Docket 97-104, RM-9048
HUNT BROADCASTING, INC.

POPULATION & AREA STUDY - CH 269C1 @ DENISON-SHERMAN, TEXAS
[DEPICTING PERSONS AND LAND AREA SERVED WITH MAXIMUM CLASS C1]
(USING CH 269C1 APPLICATION REFERENCE COORDINATES - DA)

KDVE (FM) POP COUNTS
Application Site

4

**EXHIBIT E
Figure 12**

	SI	County	Co. Pop.	percent	Pop.	Total
723	TX	Parker	64785	1	648	
613	TX	Fannin	27804	6	1688	
596	TX	Dallas	1852810	13	240865	
759	TX	Tarrant	1170103	23	269124	
582	TX	Collin	264036	34	89772	
708	TX	Montague	17274	68	11746	
787	TX	Wise	34679	68	23582	
630	TX	Grayson	95021	99	94071	
601	TX	Denton	273525	100	273525	
588	TX	Cooke	30777	100	30777	
TX TOTAL =						1,035,778
828	OK	Jefferson	7010	1	70	
802	OK	Carter	42919	24	10301	
838	OK	Marshall	10829	85	7039	
836	OK	Love	8157	99	8075	
OK TOTAL =						25,485
TOTAL POPULATION =						1,061,263

**SEE EXHIBIT E, FIGURE 11 FOR AD 269C POPULATION
& LAND AREA COMPUTATIONS**

Total AD 269C population inside 60 dBu contour - 1,641,373
AD Ch 269C Vs AP 269C1 Gain 580,110

Land area inside 60 dBu contour (91.8 KM) - 26,485.4 Sq Km

Land area inside 60 dBu contour (67.4 KM) - 16,179.2 Sq Km
AD Ch 269C Vs AP 269C1 Gain 10,306.2 Sq Km

**ENGINEERING STATEMENT
IN SUPPORT OF A**

COUNTERPROPOSAL

Channel 267C3, Wellington, Texas
MM Docket 97-104, RM-9048
HUNT BROADCASTING, INC.

POPULATION & AREA STUDY - CH 269C1 @ DENISON-SHERMAN, TEXAS
[DEPICTING PERSONS AND LAND AREA SERVED WITH MAXIMUM CLASS C1]
(USING CH 269C1 ALLOCATION REFERENCE COORDINATES)

**EXHIBIT E
Figure 13**

AL 269 C1 POP COUNTS
RM8671

3

5/18/97

	<u>ST</u>	<u>County</u>	<u>Co. Pop.</u>	<u>percent</u>	<u>Pop.</u>	<u>Total</u>
679	TX	Lamar	43949	5	2197	
655	TX	Hunt	64343	33	21233	
801	TX	Denton	273525	42	114881	
588	TX	Cooke	30777	75	23083	
582	TX	Collin	264036	82	216510	
613	TX	Fannin	27804	99	27526	
630	TX	Grayson	95021	100	95021	
TX TOTAL =						500,451
804	OK	Choctaw	15302	2	308	
802	OK	Carter	42919	12	5150	
795	OK	Aloka	12776	16	2300	
827	OK	Johnston	10032	50	5016	
836	OK	Love	8157	61	4976	
799	OK	Bryan	32089	99	31768	
838	OK	Marshall	10829	100	10829	
OK TOTAL =						60,345
TOTAL POPULATION =						560,796

**SEE EXHIBIT E, FIGURE 11 FOR AD 269C POPULATION
& LAND AREA COMPUTATIONS**

Total AD 269C population inside 60 dBu contour - 1,641,373
AD Ch 269C Vs AL 269C1 Gain 1,080,577

Land area inside 60 dBu contour (91.8 KM) - 26,485.4 Sq Km

Land area inside 60 dBu contour (72.3 KM) - 16,424.5 Sq Km
AD Ch 269C Vs AL 269C1 Gain 10,060.9 Sq Km

**ENGINEERING STATEMENT
IN SUPPORT OF A**

COUNTERPROPOSAL

Channel 267C3, Wellington, Texas
MM Docket 97-104, RM-9048
HUNT BROADCASTING, INC.

POPULATION & AREA STUDY - CH 269C3 @ DENISON-SHERMAN, TEXAS
[DEPICTING PERSONS AND LAND AREA SERVED WITH LICENSED CLASS C3]
(USING KDVE LICENSED REFERENCE COORDINATES)

**EXHIBIT E
Figure 14**

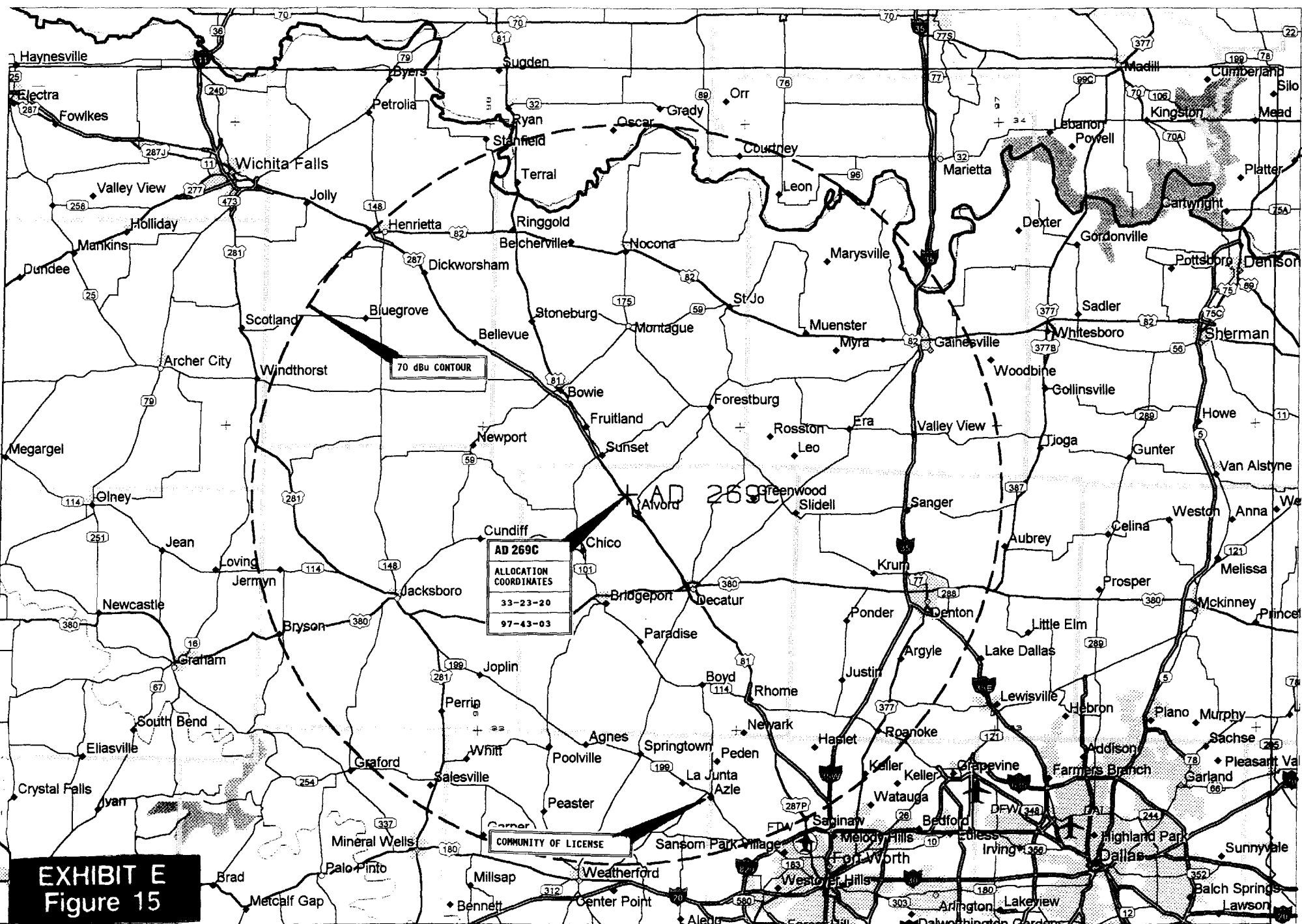
KDVE (FM) POP COUNTS 269C3				# 2	5/18/97
ST	County	Co. Pop.	percent	Pop.	Total
601	TX Denton	273525	7	19147	
613	TX Fannin	27804	11	3058	
582	TX Collin	284036	13	34325	
588	TX Cooke	30777	32	9849	
630	TX Grayson	95021	99	94071	
TX TOTAL =					160,450
836	OK Love	8157	1	82	
799	OK Bryan	32089	13	4172	
838	OK Marshall	10829	25	2707	
OK TOTAL =					6,961
TOTAL POPULATION =					167,411

**SEE EXHIBIT E, FIGURE 11 FOR AD 269C POPULATION
& LAND AREA COMPUTATIONS**

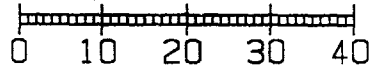
Total AD 269C population inside 60 dBu contour - 1,641,373
AD Ch 269C Vs KDVE C3 Gain 1,473,962

Land area inside 60 dBu contour (91.8 KM) - 26,485.4 Sq Km

Land area inside 60 dBu contour (38.7 KM) - 4,695.1 Sq Km
AD Ch 269C Vs KDVE C3 Gain 21,790.3 Sq Km



Scale in km



N. Lat. 33 23 20

W. Lng. 97 43 03

AD 269C @ AZLE

REYNOLDS TECHNICAL - 05/97